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Athletics, clubs, or music? The influence of college extracurricular activities on job prestige and satisfaction

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ABSTRACT

In this study, we investigate how college extracurricular activities influence students' early occupational outcomes. In particular, we examine how the type and number of extracurricular activities, as well as level of participation, influence occupational prestige and job satisfaction. Employing the three national databases, we compare the relationship between extracurricular activities and occupational outcomes across three different cohorts and different levels of college selectivity in the context of the US. Our results suggest that the type of activities pursued in college is consistently important for occupational outcomes, and different types of activities have significant influence for different cohorts. Extracurricular activities tend to have more labour market benefits for graduates of selective institutions.

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Experience should be the most substantial part of your resume. Keep in mind that your extracurricular activities are just as valuable as any work, internship, or volunteer experiences you may have had. – 'How to Write a Resume,' Office of Career Services, Harvard University

Many recent college graduates have anxiety that they will not find a decent job despite their investment in college education and skills they earned during the college (Levine and Dean 2012). At the same time, executives insist that they cannot find qualified applicants for a wide range of jobs (Goldfarb 2012), and records of work experience and excellent grades at selective schools are often inadequate indicators of skills needed for success in business (Rubin, Bommer, and Baldwin 2002). In more recent years, employers are more attentive to the 'soft' skills, such as communication skills, leadership and problem-solving abilities, which they see as largely built in extracurricular activities (Cole et al. 2007; Conrad 1999; Tomlinson 2007).

Tight job market conditions and emphases on the job attainment as an indicator of returns to college investment, as well as changing expectations of employers have increased competition among college graduates (Stevenson 2011). As media sources have shown, students and colleges consider extracurricular activities as an essential part of job hunting and employment process (Fisher 2013). Career services in many institutions guide students to 'market' their extracurricular activities. As a strategy for employment, schools advise students to list all activities that they have involved, highlighting several activities that are most relevant to the career that they are applying for, as well as leadership positions held in those activities. Furthermore, some colleges have

established extracurricular activities such as service learning, leadership programmes and apprenticeships, which would be particularly beneficial for employment (see Andring 2002; Jaunarajs 2010). Increased emphasis on extracurricular activities also raises concerns that active participation in those activities distracts students from academic activities, with negative consequences on their academic achievement and employment (Baker 2008; Benton 2011).

Despite the emphasis on extracurricular activities, there has been only a small body of research that examines the effect of these activities on career outcomes (Pascarella and Terenzini 2005). Previous studies only show an indirect effect of extracurricular activities on occupations, through their influence on educational opportunities. For example, studies examining the effects of high school extracurricular activities demonstrate that they are major factors of social stratification as they affect students' behaviour, academic performance and access to higher education and elite colleges (Adler and Adler 1994; Lareau 2011). Participating in college activities also influences student persistence, academic performance and career-relevant skills such as interpersonal skills, leadership skills and communication skills (Astin 1993; Howard 1986; Kezar and Moriarty 2000; Rubin, Bommer, and Baldwin 2002). These mediating and moderating factors have been shown to have a significant impact on wages, occupational prestige and occupational satisfaction.

Meanwhile, a series of resume studies have suggested that extracurricular activities may improve chances of hiring, particularly in the first job. Employers use extracurricular activities to gauge the quality of candidates, and differentiate among otherwise similarly qualified candidates (Cole et al. 2007); and recruiters consider type, leadership and number of activities in attributing individuals' skills from the candidates' extracurricular activities (Brown and Hesketh 2004; Hutchinson 1984; Morris 2007; Newanick and Clark 2002; Rivera 2011). However, these studies are limited for several reasons. First, these studies only focused on a specific job sector, such as professional service firms (e.g. investment banks, law firms, management consulting firms). Although the studies indicate that employers value extracurricular activities, they do not observe the realised outcomes, particularly non-pecuniary outcomes. Thus, we know little about how extracurricular activities directly influence job attainment in terms of the whole spectrum of occupations and how the experiences influence non-pecuniary outcomes, including job satisfaction. Finally, the massification of higher education has intensified requirements for jobs, with extracurricular activities now serving as a *de facto* credential (Bangerter, Roulin, and König 2012; Rivera 2011). Nonetheless, there are no empirical studies that have examined how extracurricular activities influence on occupational outcomes of different cohorts of students who may experience extracurricular activities and different job market conditions.

Students' extracurricular activities are not separable from institutional characteristics, particularly selectivity. Academic and social integration may occur differently at colleges with different selectivities (Dey et al. 1999). Furthermore, some studies argue that extracurricular activities are only the second screening, after one's academic experiences (e.g. educational credential, academic performance, test scores) are considered. From this perspective, extracurricular activities are used to compare people with similar educational credentials, particularly those who graduated from more elite colleges (Rivera 2011). Yet, unique extracurricular activities may make a candidate look better even when their educational credential is not as attractive (Cole et al. 2007). Whether the benefits that accrue from extracurricular activities vary across institutions with different levels of selectivity needs to be tested.

The purpose of this study was to examine the influence of extracurricular activities on early non-monetary occupational outcomes. We focus on the qualitative dimensions of activities – the type and number of activities, as well as the level of participation – on occupational prestige and job satisfaction. The study contributes to expanding our understanding of the changing relationship between extracurricular activities and occupational outcomes over time, by comparing the effect across the three cohorts. We also investigate how these effects vary by institutional selectivity. Based on the results, we will be able to understand what it means to participate in extracurricular activities for different cohorts of students who may face different socio-economic contexts.

College extracurricular activities

Studies on extracurricular involvement in college have examined the effect of extracurricular activities on educational and occupational choices, as well as academic performance and development of career-related skills. Yet, the findings are contested, depending on the data or sample, measurement for outcomes and controls. In general, extracurricular involvement has a positive effect on persistence and graduation (McNeal 1995; Chapman and Pascarella 1983). Based on a national sample of college students, Hanks and Eckland (1976) found that students who participated in publications or creative writing, dramatics or music, debate or political groups, student government, social science or religious groups and science or academic groups have higher probability of completing a bachelor's degree and entering into graduate or professional school. Astin (1993) showed that participation in different extracurricular activities diversifies students' career choice and aspirations: students who were in a fraternity or sorority are more likely to choose a career in business or law as a senior, while their counterparts who participated in social involvement tend to avoid business and nursing. Martin (2009) also found that an additional extracurricular membership is associated with a 20% increase in the odds of high-grade professional aspirations, such as executives, medical doctors and lawyers. However, this study was only based on one private elite institution, and the result is difficult to generalise.

With regard to students' academic achievement, researchers have indicated a particular interest in Greek and intercollegiate sport participation. Some studies found that students involved in fraternities/sororities and sports activities have a lower GPA and lower scores on GRE, LSAT and national teacher examinations (Anaya 1996; Astin 1993). The researchers argued that participation in fraternities/sororities exposes students to cheating and drinking, and club or intramural sports only provide a limited route for success (Baker 2008). Meanwhile, other studies indicated that any negative impact becomes insignificant after the initial year of college (Pascarella, Flowers, and Whitt 2001; Pascarella et al. 1996) or the negative impact is only significant for male students (Pascarella, Flowers, and Whitt 2001). Yet, small sample sizes and incomplete controls for student characteristics limit the generalisability of those studies.

Meanwhile, studies have found a significant, positive relationship between extracurricular activity involvement and career-related skills. Involvement in student clubs and organisations during college enhances students' leadership and public-speaking abilities (Kezar and Moriarty 2000), and the effect is most significant for Greek participation (Kimbrough and Hutcheson 1998; Semersheim 1996). Howard (1986) showed that extracurricular activity involvement improves administrative and interpersonal skills and general managerial effectiveness. Among people who work in service careers, people who participated in student government, school publishing and debating teams show better performance in those areas. Participation in athletic activities has no effect. On the other hand, Rubin, Bommer, and Baldwin (2002) found a contradicting result. In their study, students who participated in fraternities/sororities were better in demonstrating interpersonal skills while their counterparts in a sports team did not have the same gains in these skills. Furthermore, they found that leadership skills were significantly higher for students who held leadership positions, regardless of the type of activity.

The mechanisms by which extracurricular activities affect college graduates' job attainment have been examined by a series of resume studies. Early studies found that extracurricular activities have become more important in hiring processes. Employers refer to extracurricular activities to gauge the quality of candidates, and use them to differentiate among otherwise similarly qualified candidates. Cole et al. (2007) suggested that candidates with extensive extracurricular activities receive equally high ratings compared to their counterparts with very high academic qualifications without other experiences. Employers perceive that students who have a deep involvement in extracurricular activities have specialised skills.

When employers consider extracurricular activities for screening purposes, the type, leadership and number of activities become the factors that differentiate applicants. Yet, previous studies indicate mixed findings. Campion (1978) found that members of social fraternity/sorority and professional organisations get higher ratings on overall impressions. Membership in sports clubs is also found to

be valued by employers (Harcourt, Krizan, and Gordon 1989; Hutchinson 1984). Meanwhile, Brown and Campion (1994) argued that only professional and college government-related organisations are beneficial, but involvement in Greek organisations and recreational sports is not influential in the hiring process. In more recent years, some researchers argued that students perceive inventive activities such as marathon, sailing regattas, making films and climbing Mt. Everest are important to 'stand out from the crowd' (Brown and Hesketh 2004; Morris 2007).

Not only the type, but also the level of participation is critical for employers to consider an applicant's experience. Particularly, holding a leadership position signals the level of engagement in an activity (Hutchinson 1984). Based on data from industrial corporate CEOs, Boone, Kurtz, and Fleenor (1988) argued that over 70% of the CEOs held at least one leadership position in a club or organisation during college. In addition to the importance of leadership, Newanick and Clark (2002) found that the number of activities has an additive effect. Holding leadership in multiple organisations significantly increases positive evaluation for an applicant. Also, a good balance between social and professional-related activities provides a 'well-rounded' impression to the employers.

The effect that accrues from extracurricular activities is not identical for all college graduates. Rivera (2011) suggests that extracurricular activities have more significant influence for the 'super-elites' who graduated from the most prestigious colleges. Based on interviews of elite professional service employers, Rivera found that employers employ two stages in the screening process. In the first screening, the prestige of educational credential is often used as the most significant criterion. Once a pool is narrowed, accomplishments in extracurricular activities are employed for secondary screening. Yet, not all activities are valued the same. Employers place more value on leadership experiences, personal rather than professional related activities, and activities that are associated with socially recognisable achievement.

Theoretical framework

The influence of extracurricular activities on occupational outcomes can be explained from two perspectives: extracurricular activities as (i) experiences that facilitate students' development and (ii) indicators that employers employ to judge individuals' skills. Each component is explained by the ecological systems theory (Bronfenbrenner 1994, 2005; Bronfenbrenner and Morris 1998) and signalling theory (Spence 2002; Stiglitz 1975), respectively.

From the ecological systems theory perspective, what individuals engage in and experience on regular basis over extended period of time shapes the nature of individuals' developmental pathways and activities people engage in the future (Bronfenbrenner 1994; Feldman and Matjasko 2005) (*proximal processes*). Various extracurricular activities and roles that college students participate help them forming identities, discover preferences (Eccles and Barber 199; Larson 2000; Youniss et al. 2002) and accumulate social networks (Seibert, Kraimer, and Liden 2001) and human capital by associating with others and developing skills (Gilman, Meyers and Perez 2004; Mahoney and Stattin 2000). These developmental gains are beneficial for one's career aspirations (Feldman and Matjasko 2005) and realisation of the desired career outcomes during the job search and in the workplace (Keenan 2011).

Yet, the developmental experiences and outcomes are dependent on the different levels of environment (Bronfenbrenner 2005), that includes the immediate environment (micro system) such as family, school, peers or work place, as well linkages among these settings (e.g. the relationship between school and peers) (meso system) or with other settings (e.g. network of schools) (exo system) embedded in the macro system that of political, economic, legal and cultural contexts that shape social values and life-course opportunities for individuals. This suggests that the choice of particular extracurricular activities and its benefits to occupational outcomes are relevant to the environmental factors that surround individuals. In particular, the selectivity of colleges, given its different levels of resources, peer characteristics, networks with alumni and industry (Easterbrook 2004; Hoxby and Long 1999; Sekhri 2014), might influence the activities that students participate and the effect of those activities on career outcomes. Moreover, the value of extracurricular activities might differ by the macro system – social,

cultural, political and economic conditions over time. For example, the social value of political activities for students in the late 1970s would be different for their counterparts in the early 2000s. Thus, certain activities would be more popular in certain periods, or the value of participation might be interpreted differently for individuals at different times.

On the other hand, the benefits of extracurricular activities to occupational outcomes are relevant to how the activities are valued in the job market. (Spence 2002; Stiglitz 1975). The signalling theory explains that employers are not able to observe intangible abilities of applicants and look for 'signals' – background and experience – to gauge candidates' productivity and their fit with their respective organisations. Applicants demonstrate that they are equipped with skills that are required for the job by providing this information. Over time, the value of existing signals diminishes as activities that were positively viewed by recruiters in the past are now considered as commonplace among applicants, and new signals are developed (*escalation of signals*) (Vermeij 1994).

Extracurricular activities, often serve as a signal, beyond the traditional academic qualifications, such as the level of degree, selectivity of graduating institution and undergraduate GPA that have been used to infer the quality of candidates. In employers' eyes, people who pursue extracurricular activities have superior social skills, time-management skills and passion and commitment, compared to those who are only academically oriented. Furthermore, participation in particular types of activities or multiple activities, and/or having a leadership position in any of these activities induce employers to conclude that these applicants have specified skills, will be cooperative coworkers and will make contributions to the firm with a stronger work ethic (Brown and Campion 1994; Rubin, Bommer, and Baldwin 2002).

Applicants detect what organisations are interested in and activities that are started out of intrinsic motivation are combined with strategic intent to improve applicants' resumes (Tomlinson 2007) to stand out to potential employers. Therefore, students engage one or multiple activities in varying degrees not only from an intrinsic motivation but also for the benefits in occupational attainment. However, as more students participate in activities, the signal will escalate. For example, over time, sheer participation in one popular activity will become less meaningful for differentiating him or her from other students. The increasing competition among students will lead students to participate in different types of, or in multiple activities, and to hold leadership positions (e.g. Brown and Hesketh 2004; Morris 2007). The level of competition will vary under different job market conditions as well (Bangerter, Roulin, and König 2012; Hustinx, Cnaan, and Handy 2010).

While both theories suggest positive links between extracurricular activities and occupational attainment, the outcome of the investment in activities for development or signal might be twofold: a beneficial outcome is an overall increase in individual fitness; another, less beneficial outcome is that an individual may continue to invest resources into staying ahead of competitors while their average benefit does not increase (Frank 2006). If the increased emphasis on extracurricular activities has positive consequences, participation in extracurricular activities would result in an increased fit of individuals to their job, and this in turn increases their job satisfaction. On the other hand, if students' investment in extracurricular activities does not lead to a benefit in the job market, the impact of these activities on individuals will be perceived as less beneficial (Frank 2006).

Finally, it is important to point that the theories are connecting extracurricular activities and occupational outcomes to the individual and environmental contexts, and this presents a challenge in studying the causal effect of extracurricular activities on post-graduation outcomes. The individual characteristics as well as immediate and distal environments would affect students' different choice of activities (Huebner and Mancini 2003), and parsing out unobservable factors (e.g. motivations, preferences) is difficult. The current study partially addresses this difficulty by controlling for a set of covariates related to family background, gender, school selectivity, which might influence both participation in extracurricular activities and job outcomes. Yet, we acknowledge that selection bias may result in an overestimation of the effect of extracurricular activities. Thus, the results of this study address the relationship between activities and occupational outcomes rather than the causal effect.

Method

Data and sample

The data are from the three national longitudinal student surveys: the National Longitudinal Study of the High School Class of 1972 (NLS), the sophomore cohort of the High School and Beyond Survey of 1980 (HSB) and the National Education Longitudinal Studies of 1988 (NELS). Employing these data-sets, we are able to analyse changes in the relationship between students' extracurricular activities and occupational outcomes over time.

We restricted the sample to individuals who attained at least a bachelor's degree and who were working full time in the last survey of each study (i.e. 1979, 1992 and 2000, respectively). Therefore, we are measuring occupational outcomes 7–10 years after high school graduation. Students who do not have information about workforce participation at this time point are omitted in our sample. The final sample sizes for each data-set are 3077 (NLS), 5450 (HSB) and 5703 (NELS), respectively. For the proposed analyses, we built a single data-set that integrates multiple cohorts while applying consistent variable definitions and structures across cohorts.

Dependent variables

Occupational outcomes were measured by occupational prestige and job satisfaction. Occupational prestige considers not only an occupation's economic profile (e.g. wages) but also social perception of the relative merits of particular occupations. Among many ways to measure occupational prestige, we employed the Socioeconomic Index (SEI) (Duncan 1961). While other measures rely more on either people's evaluations of occupations (e.g. Siegel 1970) or other direct measures, such as median income and educational levels (e.g. Nam and Powers 1983), the SEI amalgamates these two components (Gillian and Cho, 1985). This index has been considered particularly beneficial for describing socio-economic distances between occupations (Featherman, Jones, and Hauser 1975; Featherman and Hauser 1976; Gullickson 2010; Treas and Tyree 1979) and processes of educational (Sewell and Hauser 1980) and occupational attainments (Blau and Duncan 1967; Featherman and Hauser 1978).

In the data-set, the census occupational classifications are available for all cohorts. Using a cross-walk for 1970–1980 census occupational classification, we matched the occupational codes to the 1980 census occupational categories. Among the 40 categories, we excluded 'other' category as no prestige score could be assigned. Then we assigned the SEI score for the 39 occupational categories.

Job satisfaction was originally measured as a binary variable (0 = dissatisfied, 1 = satisfied) in four dimensions: payment, opportunity for promotion, importance of work and job security. To calculate the overall measure of satisfaction with one's occupation, we summed the four dichotomous variables, resulting in an ordered categorical satisfaction measure ranging from 0 (lowest; satisfied with none) to 4 (highest; satisfied with all four aspects).

Independent variable

The variable of interest in this study is students' extracurricular activity participation. Each survey asked students whether and what extracurricular activities students participated in during college. To construct a consistent measure of extracurricular activities, we identified five common activities across the data-set: (i) sports teams or clubs (varsity or other intercollegiate and intramural sports), (ii) arts groups (literary, art, music or study group), (iii) political activities (student government or political groups), (iv) social clubs (hobby groups or fraternities/sororities) and (v) volunteering (community service). Then, we created four variables for extracurricular activities. First, we created a binary variable that indicates the participation status in any extracurricular activity (0 = no participation, 1 = participated in any activity). Second, the effects of different types of activities were compared to that of participating in no activities. Third, the number of extracurricular activities was calculated, which ranged from 0 (no extracurricular activities) to 5 (participated in all five activity categories). Finally, the level of engagement

was categorised as (i) no participation, (ii) holding memberships only and (iii) active participation in the activity. Since some students participate in multiple activities, we added the level of engagement in all activities and scaled it to be 0–10. However, this variable is only available for the NLS and HSB cohorts.

Covariates

To estimate the influence of extracurricular activities on occupational outcomes, we account for other factors that might influence on extracurricular participation as well as occupational outcomes. First, we control for student demographics (gender, race/ethnicity), family socio-economic status and academic achievement in high school (SAT/ACT scores) given these characteristics shape individuals' academic and extracurricular experiences. Second, other dimensions of college education might affect occupational outcomes and hence included in the analysis. In particular, we considered that selectivity of the institution (dichotomised as 0 = graduating from less-competitive or competitive institutions ('less-selective' institutions) and 1 = graduating from very, most and highly competitive institutions ('selective' institutions)), college GPA, college major (categorised as science/engineering/math (STEM), humanities, business, social sciences and education, health, and other majors) and post-baccalaureate degree attainment are significantly related to broader post-college outcomes including earnings, career success and occupational status (Pascarella and Terenzini 2005; Rivera 2011; Spilerman and Lunde 1991; Thomas 2003). Finally, since income is one of the significant predictors of job satisfaction (Rice, Philips, and McFarlin 1990), we controlled for annual salary as we estimated the job satisfaction model. Descriptive statistics for variables used for analyses are presented in Appendix A, Table A1.

Model specifications

To test the relationship between extracurricular activities and occupational prestige, we used an ordinary least squares regression:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + e, \text{ for each cohort}$$

where y is a continuous measure of Duncan's Socioeconomic Index (SEI); x_1 is participation in extracurricular activities, measured by the number and type of activities, as well as the level of involvement; x_2 is a vector of demographic, academic ability and major, selectivity of BA granting institution and graduate school attendance; and β_1 and β_2 are coefficients for extracurricular activities and covariates, respectively.

Ordered logistic regression was used to test the relationship between extracurricular activities and job satisfaction. Applying a nonlinear probability model, the ordinal regression model defines the odds that an outcome is equal to or greater than m vs. less than m given x . For example, we could compute the odds of satisfied or very satisfied ($m \geq 3$) vs. not satisfied or less satisfied ($m < 3$). Therefore, the probabilities modelled are probabilities for all outcomes greater than m compared with all outcomes less than m , assuming multiple cut-points with no intercept term. Each coefficient represents the effect of a one-unit increase in x on probabilities for individuals choosing higher satisfaction level categories vs. lower categories (e.g. very satisfied vs. satisfied, less satisfied and not satisfied). The model is formally specified as:

$$P_m = \frac{e(\alpha m + \beta_1 x_1 + \beta_2 x_2)}{1 + e(\alpha m + \beta_1 x_1 + \beta_2 x_2)} \quad (m = 1 \text{ to } m - 1), \text{ for each cohort}$$

where P_m is the probability of y choosing satisfaction level m or higher. All variables and coefficients are the same in the model above in addition to annual salary.

Finally, after the model was tested for the entire sample, we included an interaction of selectivity and types of extracurricular activities to investigate whether the effect of extracurricular activities is different for students who graduated selective colleges and their counterparts from non-selective colleges (Rivera 2011).

Limitations

The limitations in the data on extracurricular activities and occupational outcomes present some challenges for the current study. While the five categories of extracurricular activities allowed us to construct a consistent measure across the three data-sets, we may omit other activities outside of the five types (e.g. religious). Also, even within a category, experiences and benefits that accrue from specific activities might not be perfectly identical (e.g. rowing vs. football). Some important dimensions of activities such as holding a leadership position or the intensity of participation (e.g. hours spent on each activity or frequency of the activity) are missing in the data or might be inflated by self-reporting. These dimensions need to be unpacked in the future to further explain the mechanisms in which extracurricular activities influence career outcomes. In terms of occupational outcomes, the data cover individuals who work full-time 7–10 years from high school graduation, without detailed information on individuals' educational and occupational transition over time. Future study should address the benefits of extracurricular activities to short- and long-term occupational outcomes, considering the relationship between different extracurricular activities and postgraduate degree attainment.

Results

Patterns of extracurricular activity participation

Before we discuss our results, we provide a brief explanation for the patterns of students' participation in extracurricular activities across the three cohorts (Table A1). Over time, participation rate in extracurricular activities has increased: 65.6% (NLS), 70.81% (HSB) and 75.70% (NELS) of students participated in at least one activity. Students of later cohorts tended to participate broader spectrum of activities. While NLS students participated in 1.12 activities on average, HSB and NELS students participated in 1.30 and 1.52 activities, respectively. Furthermore, different generations showed different preferences in the types of activities. Yet, sports activities have been the most popular activities for all cohorts, with a stable increase in participation rate (40.47% (NLS) to 47.16% (HSB) and 48.42% (NELS)). Social activities were the second popular activities: participation rates in these activities were 27.56, 31.29 and 34.09% in NLS, HSB and NELS, respectively. While students in HSB cohort showed a higher participation in art related activities (25.33%), the most recent cohort (NELS) had a significant participation in volunteering activities (41.22%), compared to students in the previous two cohorts (about 14%).

Although the lack of data limits us investigating the influence of extracurricular activities on recent cohort, this study still provides a useful perspective for students and institutional supports, given the trends in extracurricular activities of the recent cohort. Although the definition of the activities might not be perfectly comparable, the College Senior Survey 2009 by Higher Education Research Institute (HERI) found that volunteering, sports and social activities are the most popular activities for the recent college graduates (the college seniors of 2009) (Franke et al. 2010).

H1: extracurricular activities and occupational prestige

We began by testing whether students' participation in any extracurricular activities influence occupational prestige, as measured by Duncan's SEI, and whether this effect has changed over time. Controlling for other student characteristics, extracurricular involvement had a significant influence on occupational prestige only for the HSB cohort. The regression results in Table 1 indicate that extracurricular activities had a positive effect over time, and type of activities was important than other dimensions. For the HSB cohort, participation in any activity decreased one's occupational prestige score by 0.922 points. Furthermore, involvement in multiple activities had negative consequences for occupational outcomes: an additional extracurricular activity decreased the SEI score by 0.483. If we assume two individuals in administrative occupations, this difference is equivalent to the difference between a stenographer and a chief communication operator in their SEI scores, holding other things constant. No significant effect was detected for the level of participation in either the NLS or HSB cohorts.

Table 1. Estimation of the relationship between extracurricular activities and occupational prestige.

	NLS	HSB	NELS
Extracurricular activity	−0.062 (0.670)	−0.922** (0.360)	0.515 (0.310)
Types: political groups	1.173 (0.981)	0.346 (0.490)	0.477 (0.372)
Sports groups	0.236 (0.687)	0.118 (0.340)	0.687* (0.273)
Art groups	−1.915* (0.869)	−2.141*** (0.412)	−0.797 (0.407)
Social groups	0.609 (0.744)	−1.300*** (0.359)	−0.678* (0.294)
Volunteering	−0.106 (0.956)	1.810*** (0.509)	−0.124 (0.288)
Number of activities	0.114 (0.299)	−0.483*** (0.140)	−0.0652 (0.108)
Level of participation	0.329 (0.251)	−0.185 (0.115)	NA

Note: Standard errors in parentheses.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

The activities that are positively or negatively associated with occupational prestige changed over time. Literary, art, music or study-related activities were negatively associated with occupational prestige for the NLS and HSB cohorts. Students who participated in those activities had lower job prestige by 1.92 and 2.14 points, respectively. This means that for a person who works in public administration, his occupation could have been a chief executive instead of an administrative official. Again, the estimated relationship between participation and prestige in part reflects the unobserved characteristics in individuals such as career motivations. In later periods, social clubs such as fraternities/sororities or hobby clubs had a negative association with occupational prestige. For example, involvement in social activities decreased occupational prestige by 1.30 and 0.678 for HSB and NELS cohorts, respectively. Meanwhile, students who participated in volunteering activities had a 1.81 point higher occupational prestige compared to their counterparts who did not participate in any activities (for HSB). Although sports-related activities were not significantly related to occupational prestige in earlier cohorts, the effect has become significant for the latest cohort. For NELS cohort, students who participated in varsity or other intercollegiate and intramural sports had a 0.687 point higher occupational prestige scores.

To test whether the effect of extracurricular activities differs by institutional selectivity, we included an interaction between measures of extracurricular activities and institutional selectivity (see Table 2) in the analysis. The regression results suggest that in general, the effect of extracurricular activities was not different by selectivity. Only for the HSB cohort, participation in extracurricular activities had a bigger influence for students who graduated from selective institutions. Students who participated in at least one activity at selective schools had a 1.418 point higher SEI score than students who had extracurricular activities at non-selective institutions, *ceteris paribus*. In particular, political groups and sports groups were more beneficial for graduates of selective schools. While additional activities had more benefits for graduates of selective schools, the effect of level of participation was not significantly different for the two selectivity groups. This does not provide broad support for the relationship between extracurricular activity participation and occupational prestige that has been found in some earlier studies among more elite employers (e.g. Rivera 2011).

H2: extracurricular activities and occupational satisfaction

Table 3 provides the results of an ordered logistic regression that estimates the relationship between extracurricular activities and job satisfaction. Accounting for students' demographic and educational background, extracurricular activities had a significant effect on job satisfaction for the later cohort. The sheer participation in extracurricular activities was positively associated with job satisfaction of the HSB

Table 2. Estimation of the relationship between extracurricular activities and occupational prestige: differential effect for selectivity.

	NLS	HSB	NELS
Extracurricular activity*selectivity	−0.151 (1.711)	2.418* (1.025)	−1.136 (0.719)
Types of activity*selectivity	0.0468 (2.466)	2.882** (1.062)	0.900 (0.834)
Political groups	2.161 (1.742)	1.673* (0.798)	−0.054 (0.552)
Sports groups	−2.120 (2.382)	0.141 (1.014)	−1.503 (0.788)
Art groups	−0.471 (2.133)	−1.570 (0.927)	−1.276 (0.666)
Social groups	−2.040 (2.451)	0.828 (1.292)	−0.086 (0.619)
Volunteering	−0.215 (0.805)	0.746* (0.335)	−0.386 (0.229)
Number of activities*selectivity	0.290 (0.722)	0.317 (0.274)	NA
Level of participation*selectivity			

Note: Standard errors in parentheses.
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 3. Estimation of the relationship between extracurricular activities and job satisfaction.

	NLS	HSB	NELS
Extracurricular activity	1.125 (1.46)	1.244*** (3.35)	0.901 (−1.58)
Types: political groups	1.086 (0.72)	0.887 (−1.31)	1.109 (1.21)
Sports groups	1.145 (1.60)	1.029 (0.46)	1.040 (0.65)
Art groups	0.820 (−1.95)	1.195* (2.50)	0.992 (−0.09)
Social groups	1.009 (0.11)	1.132 (1.83)	0.931 (−1.11)
Volunteering	1.002 (0.02)	0.930 (−0.78)	0.785*** (−3.86)
Number of activities	1.029 (0.80)	1.056* (2.07)	0.938** (−2.71)
Level of participation	1.005 (0.15)	1.011 (0.51)	NA

Note: Standard errors in parentheses.
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

cohort. For this cohort, college graduates who participated in extracurricular activities reported about 24% higher level of job satisfaction than their counterparts who did not participated in any activities.

While there was no effect of extracurricular activities for the NLS cohort, types and number of activities had different influence on the HSB and NELS cohorts. For the earlier cohort (HSB), art, literacy, music or study related club participants had 1.95 times higher job satisfaction, compared to individuals who did not participated in extracurricular activities. Furthermore, participating in multiple activities was positively associated with one's job satisfaction level. One additional activity increased the odds of selecting higher job satisfaction level by 1.056.

On the other hand, for the latest cohort (NELS), students who participated in volunteering activities were 1.27 times more likely to have a lower job satisfaction, compared to students who did not participate in any activities. Furthermore, participation in additional activities had a negative effect. An additional extracurricular activity decreased job satisfaction by 3%. Finally, consistent with the occupational prestige outcomes, the level of participation was not a significant predictor for job satisfaction.

Table 4 shows the results of the analysis with the interaction terms between extracurricular activities and selectivity. In earlier periods (NLS and HSB cohorts), extracurricular activities did not have a

Table 4. Estimation of the relationship between extracurricular activities and job satisfaction: differential effect for selectivity.

	NLS	HSB	NELS
Extracurricular activity*selectivity	0.962 (-0.18)	1.016 (0.10)	1.917*** (4.65)
Types of activity*selectivity	0.892	1.152	1.248
Political groups	(-0.37)	(0.70)	(1.28)
Sports groups	1.202 (0.84)	0.814 (-1.37)	1.773*** (4.89)
Art groups	1.151 (0.54)	1.006 (0.04)	0.726 (-1.89)
Social groups	1.051 (0.14)	1.284 (1.46)	1.233 (1.63)
Volunteering	0.814 (-0.66)	1.275 (1.17)	1.034 (0.26)
Number of activities*selectivity	1.053 (0.50)	1.080 (1.17)	1.205*** (3.96)
Level of participation*selectivity	1.130 (1.48)	1.090 (1.76)	NA

Note: Standard errors in parentheses.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

differential effect for different selectivity groups. Yet, for the latest cohort (NELS), benefits that accrue from participating in extracurricular activities were bigger for graduates of selective colleges. In general, students who participated in any extracurricular activity and graduated selective schools reported a higher level of job satisfaction, compared to students who involved activities at less selective schools. In particular, sports-related activities had an additional positive influence on job satisfaction of individuals from selective institutions. Although number of activities was negatively associated with job satisfaction, the negative influence was smaller for the selective groups.

Discussion

This research examines the changing influence of extracurricular activities on students' post-college job outcomes. Supporting the ecological systems theory, the results suggest that extracurricular activities contribute to individuals' developmental pathways and occupations they take in the future (Bronfenbrenner 1994; Feldman and Matjasko 2005). In addition, the developmental gains are coming from the 'contents' of the activities, rather than simple participation in multiple activities or level of involvement in those activities. Each type of activities provides students unique opportunities for identifying preference and fit for potential occupations, and this process might result in a higher level of satisfaction even if the occupational prestige is not high (e.g. art activities). On the other hand, the benefits are in part determined by employers' recognition of different extracurricular activities, as signalling theory explains. Employers prefer individuals who have specialised skills, and activities that are related to those skills are valued. It is also possible that employers are looking for homophily, hiring people with specific extracurricular activity profiles that resonate culturally with the people in their organisations (Hodgkinson 2003; Rivera 2012). For example, employers value interpersonal skills and infer these abilities from people's participation in sports or volunteer groups; however, social group activities are interpreted negatively, potentially because employers associate those activities with exposures to unfavourable behaviours such as cheating and drinking (Baker 2008).

In addition, the changing macro system that includes occupational structure and socio-economic settings would create distinct opportunities and inclinations for various types of activities. Across the three cohorts, the effects of activities and their significance seem to change a great deal over time. In particular, the positive association between volunteering and sports activities and occupational prestige for the later cohort who started their career in the 1970s and 2000s can be relevant to the shifts in the occupational structures. Since 1970s, the advancement of technology and social welfare rapidly altered the employment trends to one comprising mostly professional and managerial as well

as service occupations that deal with information, ideas and people and require higher-than-average education (Wyatt and Hecker 2006). This trend in occupational structure might have encouraged college students to develop interpersonal orientations and skills in recent years, and involvement in volunteering and sports activities were considered particularly valuable among the employers. While professional and related occupations and health service workers are projected to increase (Hecker 2005), what extracurricular activities current college students engage and how those become useful in the job market present interesting questions. Although the lack of data limits us from studying the recent cohort, some report suggested a high level of participation in extracurricular activities and popularity of volunteering, sports and social activities among the recent college graduates (Franke et al. 2010). Whether these trends still hold the same influence on occupational outcomes among the recent cohort need to be examined in future studies.

Although some studies argue that extracurricular activities help individuals with lower academic qualification to be equally qualified with their counterparts with higher academic credentials (e.g. Cole et al. 2007), the results show that academic factors matter more for job prestige, compared to extracurricular activities. In particular, graduate school attendance and undergraduate GPA have significant influence across the cohort, while the influence of selectivity has decreased over time. From the signalling theory perspective, this finding suggests that the escalation of signals through extracurricular activities is only meaningful when traditional signals are already fulfilled. In addition, participation in extracurricular activities has more benefits for graduates of selective institutions. This may indicate that employers look at what students experience and consider academic as well as non-academic experiences reflect intelligence, motivation and other abilities that are needed on the job (Roth and Bobko 2000; Schmit et al. 1995; Wolfe and Johnson 1995). Whether and how schools with different profiles provide students academic and extracurricular opportunities need to be considered. How proximal processes are shaped by micro system – colleges and universities, in terms of how collegiate and extracurricular activities complement each other in individuals' development should be further elaborated. Meanwhile, the current study adds to the two theories by examining how the developmental and signal gains through extracurricular activities are related to what people perceive about their realised occupations. The relationship between the number of activities and job satisfaction has become negative. Students with high levels of participation, like those who graduate from highly selective colleges, may have higher expectations about securing a prestigious position upon graduation. If the expectation is unmet, this may affect their job satisfaction negatively. Recent surveys suggest that this tendency is strong for recent college graduates: recent cohorts have unrealistic expectations for employability in desired fields and pay (Accenture 2013), and are least happy in the work place, compared to their counterparts with lower degrees (Gallup 2013). Also, the activities that benefit (decrease) occupational prestige do not necessarily have positive (negative) impact on job satisfaction. The inverse relationships indicate that individuals have higher satisfaction when they secured a job that is related to their personal interest rather than prestige (Spector 1997). A better understanding of the mechanisms that drive job attainment and satisfaction would help us interpret this trend.

Furthermore, participation in extracurricular activities leads to a higher level of satisfaction for people who graduated from selective schools. Students who graduated from selective universities might have more information about their career options and support for connecting their activities with occupational attainment, and these factors would contribute to a higher level of satisfaction (Schmitt et al. 1978). Also, networks shaped in clubs within selective schools may support students during the job search process (Mau and Kopischke 2001) or in workplaces (Hurlbert 1991). Future study may investigate how social networks are shaped through extracurricular activities and function in various professions.

Finally, future research should address how extracurricular activities affect social stratification. The results indicate a discrepancy between male and female students and among race/ethnicity subgroups in occupational outcomes (Adelman 2006; Dale and Krueger 2002). Among college graduates, the gender and racial disparities in occupational prestige disappeared, but job satisfaction was lower for female as well as black and Asian students. The ecological systems theory (Bronfenbrenner 1994, 2005; Feldman and Matjasko 2005) provides some indication of how micro, meso and exo systems might

influence students' selection into different activities as well as the benefits that accrue from the activities. How students' different demographic and family backgrounds, community and college characteristics, and each of their connection with industry or professionals shape opportunities for extracurricular and academic activities and how these experiences influence subsequent labour market outcomes must be investigated.

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No potential conflict of interest was reported by the authors.

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References

- Accenture. 2013. College Graduate Employment Survey: Key Findings. <http://www.cpwerx.de/SiteCollectionDocuments/PDF/Accenture-2013-College-Graduate-Employment-Survey.pdf>
- Adelman, C. 2006. *The Toolbox Revisited: Paths to Degree Completion from High School through College*. Washington, DC: U.S. Department of Education.
- Adler, P. A., and P. Adler. 1994. "Social Reproduction and the Corporate Other: The Institutionalization of Afterschool Activities." *The Sociological Quarterly* 35 (2): 309–328.
- Anaya, G. 1996. "College Experiences and Student Learning: The Impact of Academic and Non-academic Activities." *Journal of College Student Development* 37 (6): 1–12.
- Andring, H. 2002. "Advising the Involved Student: When Extracurricular Involvement Compromises Academic Achievement." *The Mentor: An Academic Advising Journal* 4 (3), September 9. Retrieved from <http://dus.psu.edu/mentor/old/articles/020909ha.htm>.
- Astin, A. W. 1993. *What Matters in College? Four Critical Years Revisited*. San Francisco, CA: Jossey Bass.
- Baker, C. N. 2008. "Under-represented College Students and Extracurricular Involvement: The Effects of Various Student Organizations on Academic Performance." *Social Psychology of Education* 11: 273–298.
- Bangerter, A., N. Roulin, and C. J. König. 2012. "Personnel Selection as a Signaling Game." *Journal of Applied Psychology* 97 (4): 719–738.
- Benton, T. H. 2011. "A Perfect Storm in Undergraduate Education." *The Chronicle of Higher Education*, April 3. <http://chronicle.com/article/A-Perfect-Storm-in/126969>
- Blau, P. M., and O. D. Duncan. 1967. *The American Occupational Structure*. New York, NY: John Wiley and Sons.
- Boone, L. E., D. L. Kurtz, and C. P. Fleenor. 1988. "CEOs: Early Signs of a Business Career." *Business Horizons* 31 (5): 20–24.
- Bronfenbrenner, U. 1994. "Ecological Models of Human Development." In *International encyclopedia of education*, edited by T. Husen and T. N. Postlethwaite, 1643–1647. Oxford: Pergamon Press/Elsevier Science.
- Bronfenbrenner, U., and P. A. Morris. 1998. "The Ecology of Developmental Processes." In *Handbook of Child Psychology*, edited by R. M. Lerner, 993–1082. New York, NY: Wiley.
- Bronfenbrenner, U. 2005. *Making Human Beings Human*. Thousand Oaks: Sage.
- Brown, B. K., and M. A. Campion. 1994. "Biodata Phenomenology: Recruiters' Perceptions and Use of Biographical Information in Resume Screening." *Journal of Applied Psychology* 79 (6): 897–908.
- Brown, P., and A. Hesketh. 2004. *The Mismanagement of Talent: Employability and Jobs in the Knowledge Economy*. Oxford: Oxford University Press.

- Campion, M. A. 1978. "Identification of Variables Most Influential in Determining Interviewers' Evaluations of Applications in a College Placement Center." *Psychological Reports* 42: 947–952.
- Cole, M. S., R. S. Rubin, H. S. Feild, and W. F. Giles. 2007. "Recruiters' Perceptions and Use of Applicant Resume Information: Screening the Recent Graduate." *Applied Psychology* 56 (2): 319–343.
- Chapman, D. W., and E. T. Pascarella. 1983. "Predictors of Academic and Social Integration of College Students." *Research in Higher Education* 19 (3): 295–322.
- Conrad, C. A. 1999. *Soft Skills and the Minority Work Force: A Guide for Informed Discussion*. Washington, DC: Joint Center for Political Economic Studies.
- Dale, S. B., and A. B. Krueger. 1999. "Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables." NBER Working paper 7322.
- Dale, S. B., and A. B. Krueger. 2002. "Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables." NBER Working paper 7322.
- Dey, E. L., L. A. Wimsatt, B. S. Lee, and E. W. Meader. 1999. *Long-term Effect of College Quality on the Occupational Status of Students*. Stanford, CA: National Center for Postsecondary Improvement.
- Duncan, O. D. 1961. "A Socioeconomic Index for All Occupations." In *Occupations and Social Status*, edited by J. Reiss Jr, 109–138. New York, NY: Free Press of Glencoe.
- Easterbrook, G. 2004. "Who Needs Harvard?" *The Atlantic*, October.
- Featherman, D. L., F. L. Jones, and R. M. Hauser. 1975. "Assumptions of Social Mobility Research in the U.S.: The Case of Occupational Status." *Social Science Research* 4 (4): 329–360.
- Featherman, D. L., and R. M. Hauser. 1976. "Prestige or Socioeconomic Scales in the Study of Occupational Achievement." *Sociological Methods and Research* 4 (4): 402–422.
- Featherman, D., and R. Hauser. 1978. *Opportunity and Change*. New York: Academic Press.
- Feldman, A. F., and J. L. Matjasko. 2005. "The Role of School-Based Extracurricular Activities in Adolescent Development: A Comprehensive Review and Future Directions." *Review of Educational Research* 75 (2): 159–210.
- Franke, R., S. Ruiz, J. Sharkness, L. DeAngelo, and J. Pryor. 2010. *Findings from the 2009 Administration of the College Senior Survey (CSS): National Aggregates*. Higher Education Research Institute, Graduate School of Education and Information Studies, University of California, Los Angeles.
- Frank, R. H. 2006. *Microeconomics and Behavior*. New York: McGraw-Hill.
- Gallup. 2013. State of the American Workplace: Employee Engagement Insights for U.S. Business Leaders. Washington, DC: Gallup. <http://employeeengagement.com/wp-content/uploads/2013/06/Gallup-2013-State-of-the-American-Workplace-Report.pdf>
- Gillian, S., and J. H. Cho. 1985. "Socioeconomic Indexes and the New 1980 Census Occupational Classification Scheme." *Social Science Research* 14 (2): 74–168.
- Gilman, R., J. Meyers, and L. Perez. 2004. "Structured Extracurricular Activities among Adolescents: Findings and Implications for School Psychologists." *Psychology in the Schools* 41 (1): 31–41.
- Gullickson, A. 2010. "Racial Boundary Formation at the Dawn of Jim Crow: The Determinants and Effects of Black/Mulatto Occupational Differences in the United States, 1880." *American Journal of Sociology* 116 (1): 187–231.
- Goldfarb, R. W. 2012. "How to Bridge the Hiring Gap." *The New York times*, November 10. http://www.nytimes.com/2012/11/11/jobs/bridging-the-hiring-gap-for-college-graduates.html?_r=0
- Hanks, M., and B. Eckland. 1976. "Athletics and Social Participation in the Educational Attainment Process." *Sociology of Education* 49: 271–294.
- Harcourt, J., A. C. Krizan, and G. Gordon. 1989. "Résumé Content Preferences of Fortune 500 Companies." *Business Education Forum* 34–36.
- Hecker, D. E. 2005. "Occupational Employment Projections to 2014." *Monthly Labor Review* 128 (11): 70–101.
- Hodgkinson, G. P. 2003. "The Interface of Cognitive and Industrial, Work and Organizational Psychology." *Journal of Occupational and Organizational Psychology* 76: 1–25.
- Howard, A. 1986. "College Experiences and Managerial Performance." *Journal of Applied Psychology* 71 (3): 530–552.
- Hoxby, C. M., and B. T. Long. 1999. "Explaining Rising Income and Wage Inequality among the College-Educated." NBER Working Paper 6873.
- Huebner, A. J., and J. A. Mancini. 2003. "Shaping Structured Out-of-School Time Use among Youth: The Effects of Self, Family, and Friend Systems." *Journal of Youth and Adolescence* 32 (6): 453–463.
- Hurlbert, J. S. 1991. "Social Networks, Social Circles, and Job Satisfaction." *Work and Occupations* 18: 415–430.
- Hustinx, L., R. A. Cnaan, and F. Handy. 2010. "Navigating Theories of Volunteering: A Hybrid Map for a Complex Phenomenon." *Journal for the Theory of Social Behaviour* 40 (4): 410–434.
- Hutchinson, K. L. 1984. "Personnel Administrators' Preferences for Resume Content: A Survey and Review of Empirically Based Conclusions." *Journal of Business Communication* 21 (4): 5–14.
- Jaunarajs, I. 2010. "Competition Promotes Career Exploration for First Year Students: A Housing and Career Services Partnership." Paper presented at the annual conference of the National Career Development Association, St. Louis, MO.
- Keenan, L. 2011. "The Effect of Extracurricular Activities on Career Outcomes: A Literature Review." *Student Psychology Journal* 1: 149–162.
- Kezar, A., and D. Moriarty. 2000. "Expanding Our Understanding of Student Leadership Development: A Study Exploring Gender and Race/Ethnicity." *Journal of College Student Development* 41 (1): 55–70.

- Kimbrough, W. M., and P. A. Hutcheson. 1998. "The Impact of Membership in Black Greek-letter Organizations on Black Students' Involvement in Collegiate Activities and Their Development of Leadership Skills." *The Journal of Negro Education* 67 (2): 96–105.
- Lareau, A. 2011. *Unequal Childhoods: Class, Race, and Family Life*. Berkeley: University of California Press.
- Larson, R. W. 2000. "Toward a Psychology of Positive Youth Development." *American Psychologist* 55 (1): 170–183.
- Levine, A., and D. R. Dean. 2012. *Generation on a Tightrope: A Portrait of Today's College Student*. San Francisco, CA: Jossey-Bass.
- Mahoney, J. L., and H. Stattin. 2000. "Leisure Activities and Adolescent Antisocial Behavior: The Role of Structure and Social Context." *Journal of Adolescence* 23 (2): 113–127.
- Martin, N. D. 2009. "Social Capital, Academic Achievement, and Postgraduation Plans at an Elite, Private University." *Sociological Perspectives* 52 (2): 185–210.
- Mau, W., and A. Kopischke. 2001. "Job Search Methods, Job Search Outcomes, and Job Satisfaction of College Graduates: A Comparison of Race and Sex." *Journal of Employment Counseling* 38 (3): 141–149.
- McNeal, R. B. 1995. "Extracurricular Activities and High School Dropouts." *Sociology of Education* 68 (1): 62–80.
- Morris, S. 2007. "A Stand-out CV: So Much to Do, So Little Time." *The Independent*, October 17. <http://www.independent.co.uk/student/postgraduate/mbas-guide/a-stand-out-cv-so-much-to-do-so-little-time-394933.html>
- Nam, C. B., and M. G. Powers. 1983. *The Socioeconomic Approach To Status Measurement (with a Guide to Occupational and Socioeconomic Status Scores)*. Houston: Cap and Gown Press.
- Newanick, R. C., and E. M. Clark. 2002. "The Differential Effects of Extracurricular Activities on Attributions in Resume Evaluation." *International Journal of Selection and Assessment* 10 (3): 206–217.
- Pascarella, E. T., M. Edison, A. Nora, L. S. Hagedorn, and P. T. Terenzini. 1996. "Influences on Students' Openness to Diversity and Challenge in the First Year of College." *The Journal of Higher Education* 67: 174–195.
- Pascarella, E. T., L. Flowers, and E. J. Whitt. 2001. "Cognitive Effects of Greek Affiliation in College: Additional Evidence." *NASPA Journal* 38: 280–301.
- Pascarella, E. T., and P. T. Terenzini. 2005. *How College Affects Students: A Third Generation of Research*. 2nd ed. San Francisco, CA: Jossey-Bass.
- Rice, R. W., S. M. Phillips, and D. B. McFarlin. 1990. "Multiple Discrepancies and Pay Satisfaction." *Journal of Applied Psychology* 75 (4): 386–393.
- Rivera, L. A. 2011. "Ivies, Extracurriculars, and Exclusion: Elite Employers' Use of Educational Credentials." *Research in Social Stratification and Mobility* 29 (1): 71–90.
- Rivera, L. A. 2012. "Hiring as Cultural Matching: The Case of Elite Professional Service Firms." *American Sociological Review* 77: 999–1022.
- Roth, P. L., P. Bobko. 2000. "College Grade Point Average as a Personnel Selection Device: Ethnic Group Differences and Potential Adverse Impact." *Journal of Applied Psychology* 85: 399–406.
- Rubin, R. S., W. H. Bommer, and T. T. Baldwin. 2002. "Using Extracurricular Activity as an Indicator of Interpersonal Skill: Prudent Evaluation or Recruiting Malpractice?" *Human Resource Management* 41 (4): 441–454.
- Schmit, M. J., A. M. Ryan, S. L. Stierwalt, and S. L. Powell. 1995. "Frame-of-Reference Effects on Personality Scores and Criterion-related Validity." *Journal of Applied Psychology* 80: 607–620.
- Schmitt, N., B. W. Coyle, J. K. White, and J. Rauschenberger. 1978. "Background, Needs, Job Perceptions, and Job Satisfaction: A Causal Model." *Personnel Psychology* 31: 889.
- Semersch, K. L. 1996. "Undergraduate Greek Leadership Experiences: A Proven Method for Gaining Career Related and Life-long Skills." *Campus Activities Programming* 29 (3): 56–60.
- Sekhari, S. 2014. *Prestige Matters: Value of Connections Formed in Elite Colleges*. University of Virginia: Unpublished work.
- Sewell, W. H., R. M. Hauser, and W. C. Wolf. 1980. "Sex, Schooling and Occupational Status." *American Journal of Sociology* 86 (3): 551–583.
- Siegel, P. M. 1970. "Occupational Prestige in the Negro Subculture." *Sociological Inquiry* 40 (2): 156–171.
- Spector, E. 1997. *Job Satisfaction: Application, Assessment, Causes, and Consequences*. Thousand Oaks, CA: Sage.
- Spence, M. 2002. "Signaling in Retrospect and the Informational Structure of Markets." *American Economic Review* 92 (3): 434–459.
- Spilerman, S., and T. Lunde. 1991. "Features of Educational Attainment and Job Promotion Prospects." *American Journal of Sociology* 97 (3): 689–720.
- Stevenson, J. 2011. *Understanding the Value of Extra-curricular Activities in Creating Graduates with Impact in Education*. Heslington: The Higher Education Academy.
- Stiglitz, J. E. 1975. "The Theory of Screening, Education, and the Distribution of Income." *American Economic Review* 65 (3): 283–300.
- Seibert, S. E., M. L. Kraimer, and R. C. Liden. 2001. "A Social Capital Theory of Career Success." *The Academy of Management Journal* 44 (2): 219–237.
- Thomas, S. L. 2003. "Longer-term Economic Effects of College Selectivity and Control." *Research in Higher Education* 44: 263–299.
- Tomlinson, M. 2007. "Graduate Employability and Student Attitudes and Orientations to the Labour Market." *Journal of Education and Work* 20 (4): 285–304.
- Treas, J., and A. Tyree. 1979. "Prestige Versus Socioeconomic Status in the Attainment Processes of American Men and Women." *Social Science Research* 8 (3): 201–221.

Vermeij, G. J. 1994. "The Evolutionary Interaction among Species: Selection, Escalation, and Coevolution." *Annual Review of Ecology and Systematics* 25: 219–236.

Wolfe, R. N., and S. D. Johnson. 1995. "Personality as a Predictor of College Performance." *Educational and Psychological Measurement* 55: 177–185.

Wyatt, I. D., and D. E. Hecker. 2006. "Occupational Changes during the 20th Century." *Monthly Labor Review* 129 (3): 35–56.

Youniss, J., S. Bales, V. Christmas-Best, M. Diversi, M. McLaughlin, and R. Silbereisen. 2002. "Youth Civic Engagement in the Twenty-First Century." *Journal of Research on Adolescence* 12 (1): 121–148.

Appendix A.

Table A1. Descriptive statistics and definitions of variables.

Variables	NLS	HSB	NELS	Description
Non-selective	78.91%	72.57%	58.42%	Selectivity of the BA degree institution, based on Barron's <i>Profiles of American Colleges</i> . 0 = less-competitive or competitive, 1 = very, most and highly competitive institutions
Selective	21.26%	27.43%	41.58%	
Extracurricular activities	65.60%	70.81%	75.70%	1 if participated in any extracurricular activities, 0 if not
Types: Political activities	14.88%	13.54%	14.23%	Type of extracurricular activities. Non-participated group as the reference group
Sports activities	40.47%	47.16%	48.42%	
Art activities	18.76%	25.33%	13.72%	
Social groups	27.56%	31.29%	34.09%	
Volunteering activities	13.53%	14.01%	41.22%	
Number of activities	1.12 (1.09)	1.30 (1.16)	1.52 (1.23)	Number of activities participated; ranges 0–5
Level of participation	2.97 (1.61)	3.13 (1.68)	NA	Sum of level of participation in all participated activities (0 = no participation, 1 = having membership only and 2 = active participation); ranges 0–10
Occupational prestige	63.81 (17.76)	54.47 (10.94)	53.64 (9.73)	Duncan's Socio-economic Index (SEI) based on the occupational classification of 1980 census.
Job satisfaction	3.24 (1.03)	2.83 (1.26)	3.28 (0.95)	Job satisfaction measured in four job satisfaction dimensions (pay, promotion, importance, and security); ranges 0 to 4.
SES (continuous)	0.38 (0.70)	0.44 (0.71)	0.46 (0.71)	Continuous measure of SES, composed of parental education, occupation and income
Female	47.54%	51.72%	55.63%	1 if female, 0 if male
White	88.83%	74.73%	76.63%	1 if White/Black/Hispanic/Asian, 0 otherwise
Black	7.69%	9.15%	6.20%	
Hispanic	1.74%	10.08%	6.64%	
Asian	1.74%	6.04%	10.53%	
SAT/ACT score	1095.2 (172.51)	1066.82 (171.35)	1075.41 (169.13)	ACT score transferred to SAT score
Undergraduate GPA	2.92 (0.47)	2.87 (0.52)	2.99 (0.48)	Accumulative undergraduate GPA, adjusted to 0 to 4 scale
Major in Humanity	7.88%	12.56%	17.66%	1 if majored in the field, 0 otherwise
Major in STEM	19.88%	25.69	19.04%	
Major in social science and education	23.75%	23.31%	31.63%	
Major in business	13.02%	22.85%	18.06%	
Major in health	9.17%	8.84%	7.32%	
Major in other fields	2.5%	3.44%	5.32%	
Graduate school	13.24%	21.85%	13.89%	1 if highest level of education is MA or Doctorate degree
Annual earnings	13.07 (6.88)	14.81 (18.79)	37.77 (22.50)	Annual salary in thousand dollars
Sample size (un-weighted)	3044	5445	5679	

Table A2. Participation in extracurricular activities on occupational prestige and job satisfaction.

	Occupational prestige			Job satisfaction		
	NLS	HSB	NELS	NLS	HSB	NELS
Extracurricular activities	-0.062 (0.67)	-0.922** (0.36)	0.515 (0.31)	1.125 (1.46)	1.244*** (3.35)	0.901 (-1.58)
Selective	2.425** (0.85)	0.780 (0.42)	-0.558 (0.32)	0.930 (-0.72)	1.051 (0.64)	0.942 (-0.94)
Female	-3.489*** (0.71)	0.489 (0.33)	0.419 (0.28)	1.003 (0.03)	1.030 (0.46)	0.844** (-2.76)
Black	3.631** (1.31)	0.010 (0.57)	-0.343 (0.57)	0.774 (-1.57)	1.157 (1.36)	0.580*** (-4.64)
Hispanic	3.270 (2.45)	1.391** (0.54)	0.892 (0.53)	1.032 (0.11)	1.218 (1.95)	0.924 (-0.69)
Asian	-3.074 (2.42)	0.957 (0.68)	0.629 (0.42)	0.681 (-1.37)	1.309* (2.07)	0.639*** (-4.84)
SES	0.611 (0.51)	-0.304 (0.24)	0.058 (0.20)	1.096 (1.54)	0.991 (-0.21)	0.929 (-1.67)
SAT/ACT score	0.011*** (0.00)	0.002 (0.00)	0.002* (0.00)	1.000 (-1.31)	1.000 (-0.89)	1.000 (-1.51)
Humanity major	-2.618 (2.18)	-2.095* (1.02)	0.048 (0.67)	0.660 (-1.55)	0.924 (-0.42)	0.880 (-0.94)
Social science and Education	-1.727 (2.02)	-0.780 (0.96)	2.528*** (0.62)	0.687 (-1.54)	1.047 (0.26)	1.156 (1.13)
STEM	-0.688 (2.03)	3.013** (0.96)	3.462*** (0.64)	0.689 (-1.50)	1.229 (1.15)	1.419* (2.54)
Business	-3.913* (1.85)	-3.165** (0.98)	0.236 (0.66)	0.742 (-1.18)	1.050 (0.27)	1.488** (2.88)
Health	1.236 (2.55)	4.219*** (1.10)	4.684*** (0.76)	0.730 (-1.26)	1.033 (0.17)	1.280 (1.54)
Undergraduate GPA	2.999*** (0.82)	2.004*** (0.35)	2.870*** (0.32)	1.097 (0.99)	1.058 (0.88)	1.189* (2.56)
Graduate school	6.287*** (0.98)	7.459*** (0.40)	4.741*** (0.38)	1.281* (2.06)	0.908 (-1.30)	0.980 (-0.23)
Income		NA		1.079*** (10.08)	1.000 (0.05)	1.037*** (15.68)

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Table A3. Participation in extracurricular activities on occupational prestige and job satisfaction: differential effect for selectivity.

	Occupational prestige			Job satisfaction		
	NLS	HSB	NELS	NLS	HSB	NELS
Extracurricular activities	-0.028 (0.764)	-1.517*** (0.421)	0.900* (0.374)	1.135 (1.36)	1.239** (2.77)	0.720*** (-4.02)
Selective	2.524 (1.375)	-1.001 (0.906)	0.320 (0.703)	0.954 (-0.28)	1.038 (0.27)	0.574*** (-4.46)
Female	-3.488*** (0.710)	0.440 (0.332)	0.433 (0.278)	1.003 (0.03)	1.029 (0.45)	0.837** (-2.89)
Black	3.629** (1.311)	-0.028 (0.572)	-0.372 (0.566)	0.773 (-1.57)	1.157 (1.36)	0.586*** (-4.55)
Hispanic	3.263 (2.453)	1.347* (0.540)	0.895 (0.533)	1.029 (0.10)	1.218 (1.94)	0.925 (-0.67)
Asian	-3.070 (2.427)	0.936 (0.677)	0.590 (0.426)	0.680 (-1.38)	1.309* (2.07)	0.653*** (-4.59)
SES	0.610 (0.512)	-0.290 (0.240)	0.059 (0.199)	1.096 (1.54)	0.991 (-0.21)	0.929 (-1.67)
SAT/ACT score	0.011*** (0.003)	0.002 (0.001)	0.002* (0.001)	1.000 (-1.32)	1.000 (-0.89)	1.000 (-1.68)
Humanity major	-2.624 (2.176)	-2.061* (1.029)	0.048 (0.671)	0.661 (-1.55)	0.924 (-0.42)	0.873 (-1.00)
Social science and Education	-1.730	-0.756	2.537***	0.687	1.047	1.141

(Continued)

Table A3. (Continued)

	Occupational prestige			Job satisfaction		
	NLS	HSB	NELS	NLS	HSB	NELS
STEM	(2.022) −0.687 (2.026)	(0.971) 3.009** (0.968)	(0.619) 3.485*** (0.638)	(−1.54) 0.690 (−1.49)	(0.26) 1.229 (1.15)	(1.02) 1.382* (2.35)
Business	−3.914* (1.849)	−3.146** (0.996)	0.228 (0.658)	0.743 (−1.17)	1.051 (0.27)	1.475** (2.82)
Health	1.233 (2.553)	4.256*** (1.109)	4.686*** (0.755)	0.731 (−1.26)	1.033 (0.17)	1.258 (1.43)
Undergraduate GPA	3.000*** (0.820)	1.986*** (0.352)	2.857*** (0.315)	1.097 (0.99)	1.058 (0.88)	1.196** (2.65)
Graduate School	6.290*** (0.976)	7.472*** (0.400)	4.760*** (0.379)	1.282* (2.07)	0.908 (−1.30)	0.972 (−0.33)
Income	NA	1.079*** (10.07)	1.000 (0.05)	1.037*** (15.72)		
Extracurricular activity*Selective	−0.151 (1.711)	2.418* (1.025)	−1.136 (0.719)	0.962 (−0.18)	1.016 (0.10)	1.917*** (4.65)

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Table A4. Types of extracurricular activities on occupational prestige and job satisfaction.

	Occupational Prestige			Job Satisfaction		
	NLS	HSB	NELS	NLS	HSB	NELS
Political groups	1.173 (0.981)	0.346 (0.490)	0.477 (0.372)	1.086 (0.72)	0.887 (−1.31)	1.109 (1.21)
Sports groups	0.236 (0.687)	0.118 (0.340)	0.687* (0.273)	1.145 (1.60)	1.029 (0.46)	1.040 (0.65)
Art groups	−1.915* (0.869)	−2.141*** (0.412)	−0.797 (0.407)	0.820 (−1.95)	1.195* (2.50)	0.992 (−0.09)
Social groups	0.609 (0.744)	−1.300*** (0.359)	−0.678* (0.294)	1.009 (0.11)	1.132 (1.83)	0.931 (−1.11)
Volunteering	−0.106 (0.956)	1.810*** (0.509)	−0.124 (0.288)	1.002 (0.02)	0.930 (−0.78)	0.785*** (−3.86)
Selective	2.350** (0.822)	0.601 (0.410)	−0.519 (0.312)	0.925 (−0.78)	1.055 (0.69)	0.933 (−1.10)
Female	−3.424*** (0.716)	0.806* (0.344)	0.667* (0.290)	1.026 (0.29)	0.983 (−0.27)	0.861* (−2.40)
Black	3.792** (1.297)	0.252 (0.582)	−0.066 (0.567)	0.810 (−1.31)	1.165 (1.43)	0.572*** (−4.74)
Hispanic	3.530 (2.444)	1.641** (0.534)	0.825 (0.524)	1.016 (0.05)	1.160 (1.49)	0.968 (−0.29)
Asian	−2.938 (2.412)	1.301* (0.655)	0.719 (0.423)	0.692 (−1.32)	1.188 (1.38)	0.652*** (−4.60)
SES	0.680 (0.510)	−0.308 (0.233)	0.060 (0.197)	1.102 (1.64)	0.978 (−0.52)	0.936 (−1.52)
SAT/ACT score	0.011*** (0.003)	0.002 (0.001)	0.003* (0.001)	1.000 (−1.38)	1.000 (−0.86)	1.000 (−1.29)
Humanity major	−2.148 (2.181)	−0.958 (0.968)	0.098 (0.666)	0.737 (−1.15)	0.985 (−0.09)	0.876 (−1.00)
Social science and Education	−1.870 (2.007)	−0.150 (0.935)	2.325*** (0.610)	0.697 (−1.49)	1.106 (0.60)	1.142 (1.06)
STEM	−0.537 (2.026)	3.685*** (0.922)	3.285*** (0.629)	0.692 (−1.49)	1.251 (1.31)	1.382* (2.40)
Business	−3.938* (1.849)	−2.586** (0.933)	0.132 (0.654)	0.738 (−1.21)	1.087 (0.48)	1.494** (2.99)
Health	1.404 (2.545)	4.474*** (1.041)	4.443*** (0.747)	0.753 (−1.14)	1.011 (0.06)	1.281 (1.58)
Undergraduate GPA	3.278*** (0.825)	1.952*** (0.350)	2.860*** (0.321)	1.126 (1.28)	1.072 (1.08)	1.190* (2.56)
Graduate School	6.475*** (0.976)	7.423*** (0.395)	4.751*** (0.375)	1.271* (2.01)	0.928 (−1.04)	0.990 (−0.12)
Income		NA		1.077*** (10.03)	1.001 (0.40)	1.038*** (15.99)

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Table A5. Types of extracurricular activities on occupational prestige and job satisfaction: differential effect for selectivity.

	Occupational prestige		Job Satisfaction			
	NLS	HSB	NELS	NLS	HSB	NELS
Political groups	1.189 (1.091)	-0.620 (0.594)	0.033 (0.532)	1.115 (0.79)	0.855 (-1.41)	1.019 (0.17)
Sports groups	-0.227 (0.804)	-0.366 (0.394)	0.713* (0.346)	1.104 (1.01)	1.093 (1.14)	0.836* (-2.35)
Art groups	-1.465 (1.043)	-2.204*** (0.524)	-0.129 (0.515)	0.794* (-2.01)	1.197* (2.07)	1.142 (1.14)
Social groups	0.694 (0.813)	-0.814 (0.459)	-0.123 (0.406)	1.003 (0.03)	1.057 (0.64)	0.859 (-1.82)
Volunteering	0.305 (1.090)	1.515* (0.708)	-0.106 (0.385)	1.050 (0.35)	0.852 (-1.40)	0.765*** (-3.30)
Selective	2.246 (1.206)	-0.323 (0.651)	0.069 (0.528)	0.871 (-0.92)	1.027 (0.22)	0.660*** (-4.29)
Female	-3.396*** (0.718)	0.774* (0.342)	0.692* (0.289)	1.031 (0.34)	0.981 (-0.30)	0.869* (-2.24)
Black	3.797** (1.295)	0.235 (0.579)	-0.076 (0.565)	0.810 (-1.30)	1.167 (1.44)	0.572*** (-4.73)
Hispanic	3.499 (2.445)	1.607** (0.532)	0.813 (0.524)	1.015 (0.05)	1.154 (1.43)	0.976 (-0.21)
Asian	-2.840 (2.417)	1.254 (0.656)	0.688 (0.424)	0.705 (-1.25)	1.168 (1.24)	0.666*** (-4.37)
SES	0.699 (0.508)	-0.315 (0.235)	0.058 (0.197)	1.104 (1.67)	0.974 (-0.60)	0.939 (-1.45)
SAT/ACT score	0.011*** (0.003)	0.002 (0.001)	0.003** (0.001)	1.000 (-1.38)	1.000 (-0.93)	1.000 (-1.20)
Humanity major	-2.154 (2.173)	-0.829 (0.978)	0.069 (0.658)	0.741 (-1.14)	0.984 (-0.09)	0.859 (-1.15)
Social science and Education	-1.823 (2.005)	-0.021 (0.948)	2.299*** (0.606)	0.698 (-1.49)	1.106 (0.59)	1.117 (0.89)
STEM	-0.529 (2.023)	3.837*** (0.934)	3.304*** (0.624)	0.693 (-1.49)	1.252 (1.31)	1.326* (2.09)
Business	-3.912* (1.859)	-2.426* (0.958)	0.131 (0.648)	0.739 (-1.21)	1.091 (0.50)	1.489** (2.95)
Health	1.357 (2.554)	4.640*** (1.060)	4.432*** (0.745)	0.753 (-1.14)	1.021 (0.11)	1.269 (1.52)
Undergraduate GPA	3.243*** (0.823)	1.940*** (0.350)	2.843*** (0.323)	1.128 (1.30)	1.072 (1.09)	1.193** (2.60)
Graduate School	6.427*** (0.976)	7.402*** (0.394)	4.734*** (0.375)	1.257 (1.92)	0.927 (-1.04)	0.995 (-0.06)
Income	NA	1.077*** (10.05)	1.001 (0.39)	1.038*** (15.95)		
Political*selective	0.047 (2.466)	2.882** (1.062)	0.900 (0.834)	0.892 (-0.37)	1.152 (0.70)	1.248 (1.28)
Sports*selective	2.161 (1.742)	1.673* (0.798)	-0.054 (0.552)	1.202 (0.84)	0.814 (-1.37)	1.773*** (4.89)
Art*selective	-2.120 (2.382)	0.141 (1.014)	-1.503 (0.788)	1.151 (0.54)	1.006 (0.04)	0.726 (-1.89)
Social*selective	-0.471 (2.133)	-1.570 (0.927)	-1.276 (0.666)	1.051 (0.14)	1.284 (1.46)	1.233 (1.63)
Volunteering*selective	-2.040 (2.451)	0.828 (1.292)	-0.086 (0.619)	0.814 (-0.66)	1.275 (1.17)	1.034 (0.26)

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Table A6. Numbers of extracurricular activities on occupational prestige and job satisfaction.

	Occupational Prestige			Job Satisfaction		
	NLS	HSB	NELS	NLS	HSB	NELS
Number of activities	0.114 (0.299)	−0.483*** (0.140)	−0.065 (0.108)	1.029 (0.80)	1.056* (2.07)	0.938** (−2.71)
Selective	2.784** (0.871)	0.768 (0.422)	−0.534 (0.320)	0.955 (−0.43)	1.062 (0.76)	0.950 (−0.80)
Female	−3.572*** (0.724)	0.526 (0.337)	0.380 (0.279)	0.959 (−0.48)	1.037 (0.56)	0.846** (−2.73)
Black	3.343* (1.360)	0.295 (0.584)	−0.268 (0.568)	0.721 (−1.93)	1.161 (1.37)	0.583*** (−4.59)
Hispanic	3.544 (2.495)	1.393* (0.547)	0.872 (0.533)	1.129 (0.40)	1.182 (1.62)	0.923 (−0.70)
Asian	−3.513 (2.444)	0.969 (0.681)	0.626 (0.425)	0.647 (−1.55)	1.316* (2.09)	0.633*** (−4.92)
SES	0.457 (0.524)	−0.256 (0.243)	0.112 (0.199)	1.075 (1.19)	0.986 (−0.32)	0.939 (−1.44)
SAT/ACT score	0.011*** (0.003)	0.002 (0.001)	0.003* (0.001)	1.000 (−0.91)	1.000 (−0.80)	1.000 (−1.37)
Humanity major	−2.724 (2.202)	−2.109* (1.043)	0.154 (0.675)	0.725 (−1.20)	0.917 (−0.46)	0.854 (−1.16)
Social science and Education	−1.726 (2.043)	−0.960 (0.982)	2.619*** (0.622)	0.704 (−1.43)	1.024 (0.13)	1.129 (0.94)
STEM	−0.894 (2.044)	2.844** (0.984)	3.541*** (0.640)	0.707 (−1.40)	1.220 (1.10)	1.366* (2.25)
Business	−3.990* (1.879)	−3.401*** (1.003)	0.317 (0.663)	0.767 (−1.05)	1.044 (0.23)	1.436** (2.61)
Health	1.268 (2.580)	3.886*** (1.127)	4.786*** (0.758)	0.742 (−1.20)	0.971 (−0.15)	1.246 (1.37)
Undergraduate GPA	3.055*** (0.838)	1.965*** (0.360)	2.880*** (0.316)	1.096 (0.96)	1.041 (0.61)	1.190** (2.58)
Graduate School	6.229*** (0.994)	7.429*** (0.407)	4.789*** (0.380)	1.287* (2.05)	0.924 (−1.06)	0.978 (−0.27)
Income	NA	1.082*** (10.21)	1.000 (−0.13)	1.038*** (15.80)		

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.

Table A7. Numbers of extracurricular activities on occupational prestige and job satisfaction: differential effect for selectivity.

	Occupational prestige			Job satisfaction		
	NLS	HSB	NELS	NLS	HSB	NELS
Number of activities	0.158 (0.337)	−0.690*** (0.162)	0.093 (0.139)	1.019 (0.46)	1.033 (0.99)	0.870*** (−4.63)
Selective	3.017* (1.209)	−0.248 (0.642)	0.070 (0.523)	0.905 (−0.69)	0.955 (−0.39)	0.712*** (−3.54)
Female	−3.569*** (0.723)	0.481 (0.337)	0.387 (0.278)	0.959 (−0.47)	1.032 (0.49)	0.844** (−2.77)
Black	3.336* (1.360)	0.255 (0.585)	−0.292 (0.566)	0.722 (−1.92)	1.158 (1.34)	0.589*** (−4.50)
Hispanic	3.523 (2.495)	1.337* (0.548)	0.877 (0.533)	1.139 (0.42)	1.171 (1.53)	0.923 (−0.70)
Asian	−3.506 (2.444)	0.957 (0.683)	0.599 (0.426)	0.648 (−1.54)	1.313* (2.07)	0.640*** (−4.81)
SES	0.458 (0.524)	−0.260 (0.243)	0.111 (0.199)	1.075 (1.19)	0.985 (−0.33)	0.939 (−1.44)
SAT/ACT score	0.011*** (0.003)	0.002 (0.001)	0.003** (0.001)	1.000 (−0.89)	1.000 (−0.82)	1.000 (−1.48)
Humanity major	−2.732 (2.198)	−2.039 (1.056)	0.151 (0.674)	0.726 (−1.20)	0.922 (−0.43)	0.851 (−1.18)
Social science and Education	−1.721	−0.907	2.625***	0.703	1.028	1.120

(Continued)

Table A7. (Continued)

	Occupational prestige		Job satisfaction			
	NLS	HSB	NELS	NLS	HSB	NELS
	(2.044)	(0.993)	(0.622)	(-1.44)	(0.16)	(0.88)
STEM	-0.891	2.909**	3.557***	0.706	1.227	1.350*
	(2.044)	(0.996)	(0.640)	(-1.40)	(1.13)	(2.17)
Business	-3.984*	-3.328**	0.308	0.766	1.052	1.434**
	(1.882)	(1.016)	(0.661)	(-1.05)	(0.28)	(2.60)
Health	1.268	3.997***	4.791***	0.742	0.979	1.234
	(2.579)	(1.143)	(0.758)	(-1.20)	(-0.11)	(1.31)
Undergraduate GPA	3.052***	1.947***	2.867***	1.096	1.038	1.194**
	(0.839)	(0.360)	(0.316)	(0.96)	(0.57)	(2.63)
Graduate School	6.235***	7.462***	4.789***	1.286*	0.924	0.978
	(0.995)	(0.407)	(0.380)	(2.05)	(-1.06)	(-0.26)
Income	NA	1.083***	1.000	1.038***		
		(10.23)	(-0.14)	(15.80)		
Number*selective	-0.215	0.746*	-0.386	1.053	1.080	1.205***
	(0.805)	(0.335)	(0.229)	(0.50)	(1.17)	(3.96)

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ Standard errors in parentheses.

Table A8. Level of participation on occupational prestige and job satisfaction.

	Occupational prestige		Job satisfaction	
	NLS	HSB	NLS	HSB
Level of participation	0.329	-0.185	1.005	1.011
	(0.251)	(0.115)	(0.15)	(0.51)
Selective	3.119**	1.144	0.991	1.058
	(1.123)	(0.595)	(-0.07)	(0.61)
Female	-3.627***	0.353	0.984	1.060
	(0.915)	(0.406)	(-0.14)	(0.77)
Black	2.273	1.111	0.664*	1.273
	(1.736)	(0.716)	(-1.97)	(1.82)
Hispanic	-0.767	1.537*	0.943	1.106
	(3.281)	(0.690)	(-0.15)	(0.79)
Asian	-6.398	1.759*	0.548	1.840***
	(3.426)	(0.894)	(-1.56)	(3.42)
SES	0.219	-0.345	1.048	0.990
	(0.631)	(0.308)	(0.61)	(-0.18)
SAT/ACT score	0.011***	0.003	1.000	1.000
	(0.003)	(0.002)	(-0.91)	(-0.45)
Humanity major	-3.649	-2.175	0.846	0.760
	(2.860)	(1.198)	(-0.54)	(-1.15)
Social science and Education	-1.603	-2.051	0.852	0.839
	(2.600)	(1.165)	(-0.59)	(-0.79)
STEM	-0.911	1.401	0.969	0.933
	(2.787)	(1.182)	(-0.11)	(-0.31)
Business	-3.542	-3.741**	0.997	0.855
	(3.203)	(1.167)	(-0.01)	(-0.69)
Health	-0.277	2.463	0.890	0.793
	(2.289)	(1.353)	(-0.38)	(-0.95)
Undergraduate GPA	2.518*	2.608***	0.982	1.003
	(1.005)	(0.429)	(-0.15)	(0.04)
Graduate School	6.629***	7.315***	1.472*	0.915
	(1.214)	(0.495)	(2.55)	(-1.01)
Income	NA	1.000***	1.000	
		(7.69)	(-0.06)	

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Standard errors in parentheses.